

In the Claims

1. (Currently amended) A color filter comprising:

a primary filter layer that is partially transparent to light, said primary filter layer having a transmission function as a function of wavelength said transmission function varying as a function of the spatial location on said primary filter layer, said primary filter transmitting light in a first band of wavelengths about a first characteristic wavelength at a first location in said primary filter layer and transmitting light in a second band of wavelengths about a second characteristic wavelength at a second location in said primary filter layer; and

a first trim filter comprising a layer of material that overlies said first and second locations and that preferentially attenuates light at a first trim wavelength between said first and second characteristic wavelengths, said first trim filter having a transmission function as a function of wavelength that is substantially the same at said first and second locations, wherein said first trim filter transmission function is selected to selectively block light at edges of said first and second bands of wavelengths that is not blocked by said primary filter layer transmission function, whereby said primary filter layer and said first trim filter together have a target transmission function transmitting a desired set of wavelengths.

2. (Currently amended) The color filter of Claim 1 where said first trim filter further preferentially attenuates light at a second trim wavelength, said first trim wavelength being less than one of said first and second characteristic wavelengths and said second trim wavelength being greater than ~~that~~ said one of said first and second characteristic wavelengths.

3. (Original) The color filter of Claim 1 wherein said first trim filter comprises an interference filter.

4. (Original) The color filter of Claim 1 wherein said primary filter layer comprises a first dye filter located at said first location and a second dye filter located at said second location.

5. (Original) The color filter of Claim 4 wherein said first and second dye filters are located on said first trim filter layer.

6. (Original) The color filter of Claim 1 further comprising a second trim filter, said second trim filter comprising a layer of material that preferentially attenuates light at a second wavelength that is different from each of said characteristic wavelengths and said first trim wavelength.

7. (Original) The color filter of Claim 6 wherein said dye filters are located between said first and second trim filters.

8. (Currently amended) A method for fabricating a color filter, said method comprising:

bonding a first trim filter layer to a substrate;  
bonding a primary filter layer that is partially transparent to light to said first trim filter layer, said primary filter layer having a transmission function as a function of wavelength, said transmission function varying as a function of the spatial location on said primary filter layer, said primary filter transmitting light in a first band of wavelengths about a first characteristic wavelength at a first location in said primary filter layer and transmitting

light in a second band of wavelengths about a second characteristic wavelength at a second location in said primary filter layer;

5 wherein said first trim filter layer comprises a layer of material that overlaps said first and second locations and that preferentially attenuates light at a first trim wavelength between said first and second characteristic wavelengths, said first trim filter having a transmission function as a function of wavelength that is substantially the same at said first and second locations, and wherein said  
10 first trim filter transmission function is selected to selectively block light at edges of said first and second bands of wavelengths that is not blocked by said primary filter layer transmission function, whereby said primary  
15 filter layer and said first trim filter together have a target transmission function transmitting a desired set of wavelengths.

9. (Currently amended) The method of Claim 8 where said first trim filter layer also preferentially attenuates light at a  
20 second trim wavelength, said first trim wavelength being less than one of said characteristic wavelengths and said second trim wavelength being greater than ~~that~~ said one of said characteristic wavelengths characteristic wavelengths.

10. (Original) The method of Claim 8 wherein said first trim  
25 filter layer comprises a plurality of transparent layers in which adjacent layers have different indices of refraction.

11. (Original) The method of Claim 8 further comprising  
bonding a second trim filter layer to said color filter layer such that said color filter layer is between said first and  
30 second trim filter layers, wherein said second trim filter

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layer comprises a layer of material that overlaps said first and second locations and that preferentially attenuates light at a second trim wavelength that is different from said first trim wavelength, said first characteristic wavelength, and  
5 said second characteristic wavelength, said second trim filter layer having a transmission function as a function of wavelength that is substantially the same at said first and second locations.